

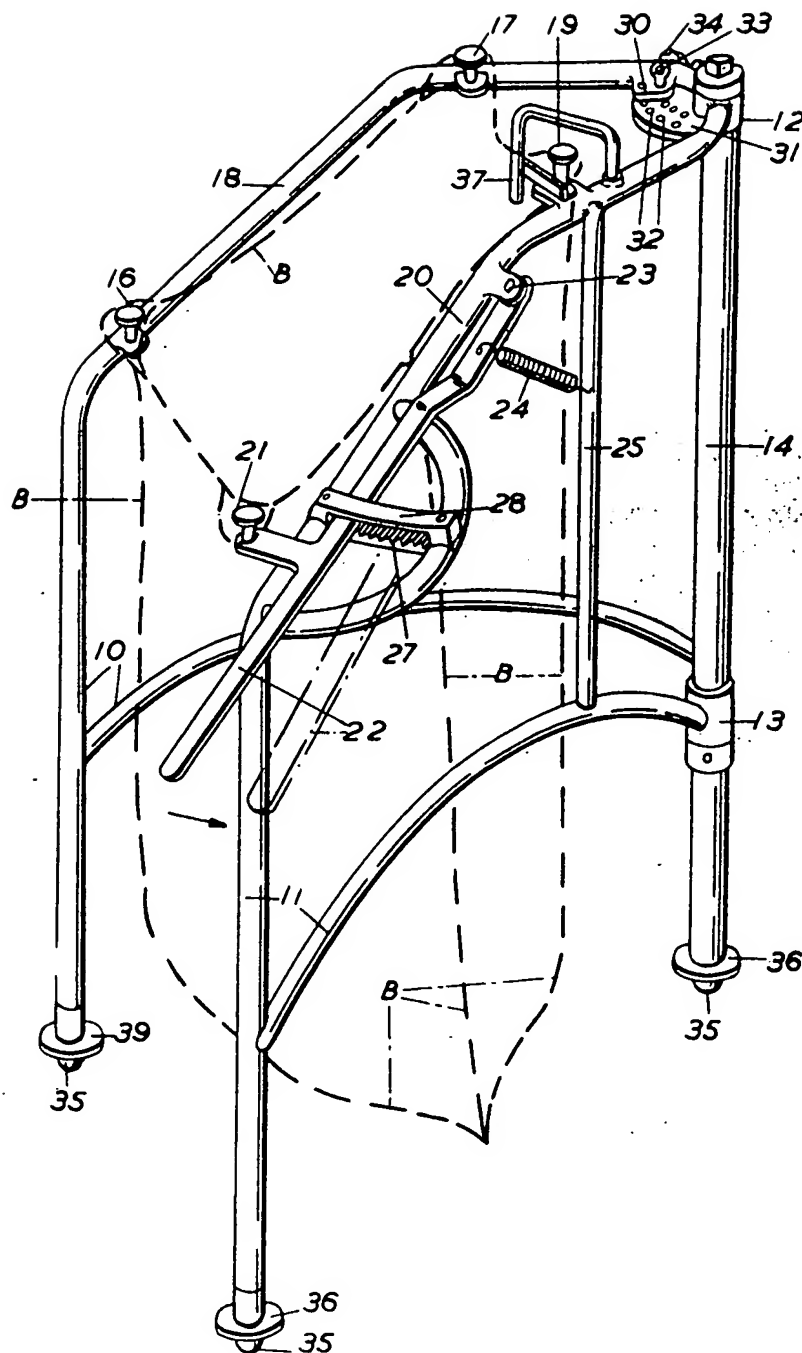
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705,287

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Britain 1954

FIG. 1.



705,287 COMPLETE SPECIFICATION

2 SHEETS

This drawing is a reproduction of the Original on a reduced scale.

SHEETS 1 & 2

FIG. 2.

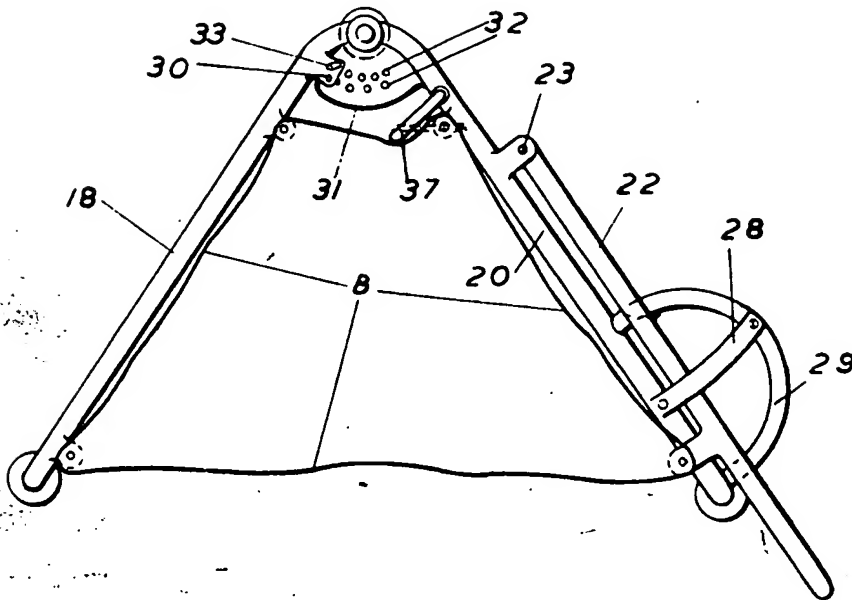
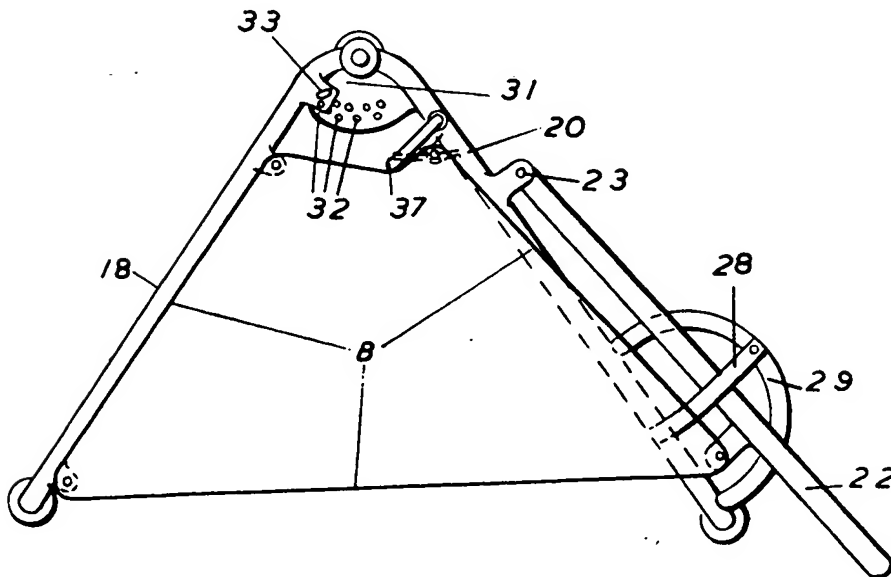


FIG. 3.





PATENT SPECIFICATION

705,287

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EXAMINER'S
COPY

DIV. 41

248

52

COMPLETE SPECIFICATION.

Improvements relating to Bag Holders.

1, WILLIAM HAROLD SIMS, a British Subject, of 3 Lansdowne Avenue, Newbold, Chesterfield, in the County of Derby, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement :—

This invention relates to bag holders for supporting sacks, bags and similar flexible containers while they are being filled.

The invention further consists in a bag holder in which several bag-supporting abutments are attached to a structure consisting of a pair of frames pivoted together about a vertical axis and another abutment is carried by a member adjustably attached to one of the frames in such a way that the abutment which it carries is displaceable outwardly to stretch the mouth of the bag more widely open.

One of the frames has a leg or foot where the two frames are pivoted together, but the other frame preferably has no contact with the ground at this point, each frame having a leg or foot at the point furthest away from their pivot, so that the structure is a three-legged one and cannot rock.

The frames are preferably shaped so that they support the rear portion of the mouth of the bag at a higher level than the forward portion, so that it is easier to load material into the bag.

A constructional form of the invention will now be described with reference to the accompanying drawings, in which :—

Figure 1 is a perspective view of a bag holder, the outline of the bag being shown in dotted lines.

Figure 2 is a plan of the holder with the bag in place but not stretched open fully.

Figure 3 is a similar view to Figure 2 but showing the mouth of the bag fully stretched ready for filling.

[Price 2s. 8d.]

The bag holder has a pair of frames 10, 11 forming a triangular or approximately triangular three-legged structure, the two frames being pivoted together by means of tubular sleeves 12, 13 on the one fitting around a vertical leg 14 on the other at what it is convenient to regard as the back of the structure. The frames extend in a diverging and generally forward direction when erected and can either be opened out to any convenient angle as shown in the drawings or can be folded up close alongside each other when not in use. One frame has two fixed upwardly extending lugs or abutments 16, 17 on its upper rail 18, which is higher at the back than at the front. The other frame has one such fixed abutment 19 on its upper rail 20 near the back and one similar abutment 21 carried by a lever or arm 22 which is pivoted to the frame at 23, the lever or arm being spring-loaded by means of a spring 24 attached to a stay 25 forming part of the frame 11. The spring 24 tends to draw the arm 22 downwards and inwards and the underside of the arm is formed with a tooth or abutment which engages with teeth 27 in a bracket 28 attached to the rail 20 and to a support 29 carried by the rail 20. The lever or arm 22 is therefore able to move the abutment 21 outwards and stretch further the mouth of a bag B supported on the four abutments 16, 17, 19, 21. The frames have co-operating plates 30, 31 with holes 32 in them, and a peg 33 held captive by a chain 34 can be passed through two registering holes, to hold the frames 10, 11 locked rigidly at the desired angle. In use the frames are erected, a bag is placed on the abutments 16, 17, 19, 21, the frames are opened out as fully as the bag will conveniently allow as in Figure 2 and the frames are locked in this position. The lever 22 is then operated to force the movable abutment 21 outwards and so strain the mouth of the bag tightly, as in Figure 3. Since the structure is a three-legged one (the

frame 10 has its back leg 14 but there is no back leg to the other frame 11) the structure cannot rock. The legs may have suitable feet 35 provided with flanges 36 to enable the structure to be used on soft ground. A member 37 attached to the rail 20 projects into the path of the mouth of the bag where it tends to extend in a straight line from the abutment 17 to the abutment 19 and this member 37 tends to ensure that this portion of the mouth of the bag will be firmly held when stretched.

The invention provides a very simple and convenient structure which can be easily erected and which will hold bags very firmly.

Instead of the locking peg 33 and registering plates 30, 31, a ratchet and pawl device may be used to hold the frames extended.

20 What I claim is :—

1. A bag holder in which several bag-supporting abutments are attached to a structure consisting of a pair of frames pivoted together about a vertical axis and another abutment is carried by a member adjustably attached to one of the frames in such a way that the abutment which it carries is displaceable outwardly to stretch the mouth of the bag more widely open.

2. A bag holder as claimed in Claim 1, in which one of the frames has a leg or foot where the two frames are pivoted together, but the other frame has no contact with the ground at this point, each frame having a leg or foot at the point furthest away from their pivot, so that the structure being three-legged, cannot rock.

3. A bag holder as claimed in either of the preceding claims, in which the frames are shaped so that they support the rear portion of the mouth of the bag at a higher level than

the forward portion, so that it is easier to load the material into the bag.

4. A bag holder according to any of the preceding claims in which the displaceable abutment is carried by a lever or arm pivoted to one of the frames.

5. A bag holder as claimed in Claim 4, in which the lever or arm is located in its extended positions by engagement with teeth carried by one of the frame members.

6. A bag holder as claimed in Claim 4 or 5, in which the lever or arm is spring loaded to hold it in engagement with its locating means.

7. A bag holder according to any of the preceding claims, in which the frames are pivotally extendable and are capable of being locked in a range of extended positions.

8. A bag holder according to Claim 7, in which the frames carry registering plates with holes in them and a peg is provided for insertion in the holes.

9. A bag holder according to Claim 7, having a ratchet and pawl device for holding the frames extended.

10. A bag holder according to any of the preceding claims, having a fixed member projecting into the line which the bag mouth assumes between two fixed abutments so as to assist in holding the bag firmly.

11. A bag holder according to any of the preceding claims, in which the frame legs have enlarged feet to facilitate use of the holder on soft ground.

12. A bag holder constructed and arranged as herein described and shown in the accompanying drawings.

W. SWINDELL & PEARSON,
Chartered Patent Agents,
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PROVISIONAL SPECIFICATION.

Improvements relating to Bag Holders.

I, WILLIAM HAROLD SIMS, a British Subject, of 3 Lansdowne Avenue, Newbold, Chesterfield, in the County of Derby, do hereby declare this invention to be described in the following statement :—

This invention relates to bag holders for supporting sacks, bags and similar flexible containers while they are being filled.

The invention consists in a bag holder having a pair of frames pivoted together about a vertical axis so that they can fold up close together or can be extended, the frames carrying abutments on which the mouth of a bag can be supported, and means for locking the frames in an opened-out position with the mouth of the bag fully open.

One of the frames also preferably includes

means for acting on one of the abutments to move it outwards, that is to say away from the centre of the bag, and thus impart an additional stretching movement to the mouth of the bag.

One of the frames has a leg or foot where the two frames are pivoted together, but the other frame preferably has no contact with the ground at this point, each frame having a leg or foot at the point furthest away from their pivot, so that the structure is a three-legged one and cannot rock.

The frames are preferably shaped so that they support the rear portion of the mouth of the bag at a higher level than the forward portion, so that it is easier to load material into the bag.

5 In carrying out the invention according to
 one example of construction I provide a pair
 of frames forming a triangular or approxi-
 mately triangular three-legged structure, the
 10 two frames being pivoted together by means
 of tubular sleeves on the one fitting around a
 vertical leg on the other at what it is con-
 venient to regard as the back of the structure.
 The frames extend in a diverging and
 15 generally forward direction when erected, and
 can be opened out to any convenient angle.
 One frame has two fixed upwardly extending
 lugs or abutments on its upper rail, which is
 higher at the back than at the front. The
 20 other frame has one such fixed abutment on
 its upper rail near the back, and one similar
 abutment carried by a bracket or arm which
 is pivoted to the frame near the front, the
 bracket or arm being spring-loaded to urge it
 25 inwards and having an operating lever, also
 spring-loaded, which can force it outwards
 against the spring action and so move the
 abutment outwards and stretch further the
 30 mouth of a bag supported on the four abut-
 ments. The frames have co-operating plates
 with holes in them, and a captive peg can be

passed through two registering holes, to hold
 the two frames locked rigidly at the desired
 angle. In use the frames are erected, a bag
 is ledged on the abutments, the frames are
 35 opened out as fully as the bag will conveni-
 ently allow, and the frames are locked in
 this position. The lever is then operated to
 force the movable abutment outwards and so
 strain the mouth of the bag tightly. The one
 40 frame has a back leg (to which the second
 frame is pivoted) and a front leg; the
 second frame has only a front leg. The
 structure cannot therefore rock. The legs
 may have suitable feet to enable the struc-
 45 ture to be used on soft ground. The whole is
 a very simple and convenient structure, which
 can be easily erected and folded up and which
 will hold bags very tightly. Instead of the
 locking peg and registering plates a ratchet
 and pawl device may be used to hold the
 frames extended.

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